

## **Pathogenicity of *Aeromonashydrophila* and lethality of its extra-cellular products in sharp teeth catfish, *Clariasgariepinus*, (Burchell)**

### **Abstract**

A study was conducted to investigate the pathogenicity and the median lethal dose (LD<sub>50</sub>) of *Aeromonashydrophila* isolated from clinically diseased catfish against apparently healthy homologous fish to evaluate the lethality of extra-cellular products (ECPs) of the isolated strain in vivo. For pathogenicity experiment, five different concentrations of *Aeromonashydrophila* strain BNS 01614 including  $3 \times 10^8$ ,  $1.5 \times 10^8$ ,  $1.5 \times 10^7$ ,  $1.5 \times 10^6$  and  $1.5 \times 10^5$  CFU/fish used via intra peritoneal. The results revealed that pathogenicity of BNS 01614 was confirmed by the mortality of 30 % to 100 % of all tested fish within 4 to 12 days with LD<sub>50</sub>  $1.5 \times 10^7$  CFU/fish. The Concentrated extracellular products (ECPs) of the selected bacterium were prepared and confirmed to be toxic in *Clariasgaripineus* with LC<sub>50</sub> of 20µg.

**Key Words:** *Aeromonashydrophila*, catfish, LD<sub>50</sub>, Pathogenicity